

tion of standards to produce color receivers capable of receiving CBS color signals in color (Ex. 204, Tr. 2586). [fol. 1025] Even manufacturers who have, since the FCC color decision, announced plans promptly to produce receiving equipment capable of receiving the new color signals, have estimated that such equipment will not be available for several months.

Hence, it is obvious that within the next few months, there will be no measurable change in the ratio between the millions of standard black-and-white sets capable of receiving only standard black-and-white signals, on the one hand, and the handful of receivers (whether new or existing sets which have been adapted or converted) capable of receiving color standards, on the other hand. Indeed, because of the present momentum of production of standard black-and-white sets, and the continued large sales thereof, and because, as noted, it will be some time before equipment in quantity capable of receiving the color standards will be produced, the proportion of standard black-and-white sets over color-signal receiving sets will doubtless increase during the next month or two.

It is, therefore, clear that as a simple matter of economics, most broadcasters (left free by the FCC to choose whether to transmit under the old black-and-white standards or the new color standards) will continue, for the next few months, to broadcast the vast majority, and probably all, of their programs under the current black-and-white standards.

9. The television manufacturing industry has explicitly recognized and widely publicized the fact that business [fol. 1026] economics and production capabilities, described in the foregoing section of this affidavit, preclude any sudden curtailment, arising out of the effectiveness of the FCC order on November 20, 1950, of existing black-and-white broadcasting. The unanimous contention of the various manufacturers who have made public statements on the issue since the FCC decision is that black-and-white television will continue in substantially undiminished volume for some time to come, that existing black-and-white receivers are not "obsolete", and that receivers capable of receiving color either in color or in black-and-white cannot be produced in quantity for a number of months.

Unqualified statements to this effect are collected in

Exhibit "A", annexed hereto. Typical excerpts from these statements are as follows:

Raymond C. Sprague, President, Radio-Television Manufacturers Association (an organization whose members comprise almost all the major television receiver manufacturers)—see Exhibit A-1:

"In fact, because of the many fine television programs that are coming on the air this fall, I believe that present black-and-white television sets are a better investment today than ever before.

• • •

"• • • black-and-white programs will continue to provide the best television entertainment for years to come • • •"

P. V. Galvin, President, Motorola Incorporated (one of the major set manufacturers)—see Exhibit A-2:

[fol. 1027] *"We feel there is nothing alarming about this decision because it does not affect today's black-and-white television"* (italics as in original)

Ross D. Siragusa, President, Admiral Corporation (one of the major set manufacturers)—see Exhibit A-3:

"• • • present excellent programming will continue in black-and-white on all four major networks • • • Columbia color and FCC's action means little or nothing to harm growth of television as we know it • • •"

Robert C. Tait, President, Stromberg-Carlson—see Exhibit A-5:

"1. For years to come the great programs on television will be in black-and-white."

William Balderston, President of Philco Corporation (one of the major television manufacturers), in a statement to Philco distributors—see Exhibit A-6:

"Color signals will be on the air only during fringe hours on a limited basis from the 107 television stations throughout the country today. Black-and-white

is and will continue to be the basic system of commercial television for years to come.

\* \* \*

"You may advise your customers that they can purchase present Philco television receivers with the knowledge that, should they so desire, these current sets may be converted *at nominal cost* to receive the presently-authorized color signals in black-and-white \* \* \* (italics supplied).

10. Plaintiffs themselves assert that substantial replacement of black-and-white television by color is not an immediate prospect. Thus in paragraph 60 of their complaint, they allege that "New sets designed to receive ~~CBS~~ standards in color will also take time to produce \* \* \*"; [fol. 1028] and paragraph 62 states that "The broadcaster of television programs will have virtually no audience at all in accordance with the CBS standards, neither a black-and-white audience nor a color audience, for a considerable period of time, if ever."

11. While I believe that many of the statements referred to in paragraphs 9 and 10 of this affidavit are unduly pessimistic and exaggerate the remoteness of color broadcasting and the availability of color receiving equipment, they are accurate to the extent that they establish that color under the new standards will not, *at least within the next few months*, substantially affect standard black-and-white broadcasting or the usefulness of existing types of black-and-white receivers. And in this connection, it is significant to note that even when color receiving equipment does reach the hands of consumers, the audience which the broadcaster of standard black-and-white programs can reach is not diminished. This is because all color receiving equipment thus far proposed or suggested leaves unaffected the receiver's ability to receive standard black-and-white. Color is *added* to the receiver; black-and-white is *not* subtracted. Hence, purchase of color receiving equipment does not fragmentize the audience for black-and-white broadcasters.

Conversely, however, as will be set forth more fully hereinafter, purchase of present types of standard black-and-white receivers does diminish the audience for the color

broadcaster, since such receiver, unless modified after purchase, cannot receive the color programs.

[fol. 1029] 12. The lack of immediate impact of color broadcasting on existing standard black-and-white broadcasting is further confirmed by the plans, or lack of them, of existing broadcasters to begin broadcasting under the new color standards. None of the networks other than CBS has given indication that they plan to broadcast color on November 20, 1950, or in the period immediately thereafter.

Even the color broadcasting plans of CBS, while extensive in terms of an inaugural service, are limited when compared to current standard black-and-white broadcasting. These plans are as follows:

Beginning on November 13, 1950, WCBS-TV in New York City will transmit color programs for public demonstration purposes. Its schedule for the week of November 13 is as follows:

November 13, 1950

10:00 - 10:15 AM (broadcast over the air)

11:00 - 11:15 AM (broadcast over the air)

3:15 - 3:30 PM (broadcast over the air)

November 14-18, inclusive

11:00 - 11:15 AM (broadcast over the air)

12:00 - 12:15 PM (broadcast over the air)

1:00 - 1:15 PM (not broadcast—closed circuit—except broadcast Nov. 18)

4:00 - 4:15 PM " " "

6:00 - 6:15 PM " " "

The foregoing schedule will not be on a commercial basis, but will be under WCBS-TV's experimental license [fol. 1030] to broadcast color. It will be seen that on November 13 and 18, there will be 45 minutes of actual broadcast each day, and 30 minutes on each of the remaining days. These broadcasts will be by WCBS-TV only, and will not be supplied to other stations on the CBS network.

The schedule for November 20-24 is as follows:

11:00 AM - 1:00 PM (broadcast over the air)

1:00 - 1:15 PM (not broadcast—closed circuit)

4:00 - 4:15 PM ( " " " " )

6:00 - 6:15 PM ( " " " " )



The November 25 schedule will be the same as that for November 18.

After the week of November 20, 1950, the CBS color schedule will gradually be expanded until it reaches 20 hours per week beginning on or about December 11, 1950. Of these 20 hours, about 3 hours a day will be during the day-time; one-half hour a day will be between 6 PM and 6:30 PM; and one-half hour a day will be after close of regular black-and-white transmission.

The broadcasts on and after November 20 will, (unless a temporary injunction be issued) be on a commercial (as distinguished from temporary experimental) basis under the authority of the Commission's order attacked by plaintiffs. It is important to emphasize, however, that *even if a temporary injunction should be issued, WCBS-TV will substantially adhere to the schedule described above.* It will do so under its experimental authority, but, of course, [fol. 1031] commercial sponsorship of such programs would then be precluded.

Network operations will begin the week of November 20; some of the broadcasts for that week will be made available to WTOP-TV in Washington. Thereafter, additional stations will be fed with the color programs. As is more fully described in the accompanying affidavit of Herbert V. Akerberg, the expansion of network operations will, during the initial period, necessarily be gradual and will depend on the availability of receiving equipment which the stations must acquire and of other equipment which the telephone company must acquire. It is certain that, by the middle of December, only a comparatively few stations will be broadcasting color programs originated by CBS—and each will do so for only about an hour a day.

Since during the initial period of color broadcasting under the new standards there will, as noted, be no color sets available for sale to the public, the broadcasts just described will necessarily be primarily for the purpose of public demonstration rather than for use in the home. CBS has completed arrangements for the lease of a space in New York City, where it will place a number of color receivers, and to which the public will be invited in order that it have the opportunity to acquaint itself with color television under the new standards. CBS will, as soon as possible on or after November 20, 1950, furnish at least two receivers to each of those affiliates who wish to carry

the CBS color broadcasts; it is hoped that these affiliates will also place these receivers in public places.

[fol. 1032] It is obvious, therefore, that for the period following November 20, 1950, and at least to the end of the year, color broadcasting will not significantly diminish black-and-white broadcasting. Indeed, substantially the only effect of color broadcasting during this period will be to permit rather a small percentage of the public to see color television for itself and thus be in a position to make an intelligent choice in deciding what equipment, if any, it wishes to purchase in the light of the Commission order.

13. In the foregoing circumstances, it is exceedingly speculative and remote as to whether there can possibly be any injury to the plaintiffs (even assuming for the sake of argument that if such injury occurs it is such as to entitle plaintiffs, or any of them, to maintain this action) arising out of the mere fact that the FCC order remains in effect from November 20, 1950, to the date of final disposition of this action by this Court. Plaintiff NBC's broadcasting activities, as noted above, cannot be affected at all.

Thus, as noted above, the mere effectiveness of the FCC order cannot affect NBC's broadcasting activities. Nor, as appears from the accompanying affidavit of Oscar Katz, is it likely that the order will substantially affect the sales by plaintiffs RCA and RCA Victor Distributing Corporation of standard black-and-white RCA receivers. Indeed, the RCA distributor in New York City has explicitly stated, following the FCC decision, that "we haven't felt any impact from color at all and can ship out every piece of TV equipment we can lay our hands on"; while another [fol. 1033] RCA distributor reported that dealers, while "mildly upset", had not cancelled or refused deliveries (see affidavit of Oscar Katz).

It should be noted that immediately following the FCC decisions on September 1 and October 10, 1950, there was enormous publicity concerning color television; and there was confusion created by some television receiver manufacturers themselves who issued statements and advertisements distorting both the effect of the FCC order and the nature of the system adopted thereby. Certainly if RCA sales were not substantially affected by these factors, they are not likely to be affected by the mere fact that, par-

suant to such decision which gave rise to the publicity and confusion, the order adopting standards becomes effective on November 20, 1950.

The improbability of substantial injury to RCA set sales is underscored by the peculiarly favorable circumstances in which RCA finds itself. Its receivers are among the most popular, and there is and has continued to be a heavy demand for them. As the affidavits of Oscar Katz, Grace Olsen (Katz affidavit, Exhibit C) and Sydonia Stanislaw (Katz affidavit, Exhibit D) establish, and as is well known in the industry, it is difficult for customers to obtain RCA sets without a considerable waiting period. Some dealers, in fact, even refuse to take orders for RCA sets because they are in short supply.

Therefore, even if there have been some cancellations of orders, as plaintiffs claim, there is no likelihood that the effectiveness of the FCC order during the interim period will injure the continuity of the production of tele-[fol. 1034] vision sets by RCA or the distribution by the distributing corporation. For if it be assumed (contrary to the public statements of RCA distributors) that there have been some cancellations, and if it be further assumed that such cancellations were due to the FCC color action rather than other probable causes (see below), then if this Court should, on final decision, annul the FCC order, it is entirely reasonable to expect that the orders for RCA receivers will be reinstated. The only effect (assuming that there is any) upon the business of RCA and the distributing corporation, therefore, would be that during the interim period between November 20, 1950, and the date of final decision by this Court these plaintiffs might have fewer unfilled orders on their books—but not fewer sales. In these circumstances, plaintiffs' peace of mind may be somewhat affected; but their business would not be.

14. In any event, there are strong indications that any cancellations of orders or diminution of sales which may have occurred in recent days or weeks are not attributable to color television at all, but to other factors which have an adverse affect on sales. As the accompanying affidavit of Oscar Katz shows, many television receivers are bought on the installment plan; in many cases, only nominal down payments were required by retailers and lengthy installment periods were granted. During the last few months, credit restrictions have been imposed. In September, the



Federal Reserve Board required a minimum down payment of 15% and a maximum installment period of 18 months. On October 16, these requirements were amended to provide for a minimum down payment of 25% and a maximum period of 15 months. (See affidavit of Oscar Katz.) In [fol. 1035] evitably, these requirements have adversely affected sales. The mere fact, therefore, that recent orders for RCA sets may have diminished somewhat is not proof of an effect of the FCC's action in respect of color. Even more likely, as the affidavit of Mr. Katz shows, is that the adverse effect is due to the new credit restrictions and other factors such as a new excise tax and rising receiver prices.

15. In any event, even if plaintiffs RCA and RCA Victor Distributing Corporation were suffering some injury in the form of reduced orders for standard RCA black-and-white television sets, such injury is plainly self-inflicted and could readily have been minimized or even avoided by RCA if it had so chosen. Detailed designs and drawings for both the adaptation and conversion of RCA receivers so that they can receive color either in black-and-white (when adapted) or color (when adapted and converted) have been available to RCA since at least November 1949, when such designs and drawings were admitted in evidence at the hearings (Exs. 216, 217, 225 and 269, Tr. 3460, 4719) and given to RCA.

In fact, on February 27, 1950, in the course of the hearing before the FCC, the Chairman of the FCC expressly suggested to Dr. Elmer W. Engstrom, Vice-President in Charge of Research, RCA Laboratories Division of plaintiff RCA, that RCA and other manufacturers could solve the problem of compatibility for all new sets simply by providing internal adaptation therein (Tr. 6153-5). Witnesses for RCA estimated the costs of such internal adaptation at only \$7-\$10 for manual switching and \$20-\$24 for [fol. 1036] more elaborate automatic switching (Tr. 8558, 10048-49, 10091; Ex. 408, pp. 30-31, Tr. 9617). The President of the Radio-Television Manufacturers Association, who was also an officer of a large television manufacturing corporation, testified that internal adaptation involved a "very minor change" (Tr. 2275), that all the preliminary engineering and design work would take only a few weeks, and that all receivers in production "could have been changed in a day or two" (Cosgrove, Tr. 2273).



Obviously, if RCA had made the simple and inexpensive changes in at least a proportion of its receivers in order to accomplish internal adaptation so that the buyer would have a choice either of purchasing a set capable of receiving only standard black-and-white programs or one capable of receiving *all* programs broadcast, whether black-and-white or color, plaintiffs would now not be faced with the problem, if any, of possible buyer resistance arising out of the fear that color broadcasts could not be received on the RCA sets which are now offered for sale. For if RCA had accepted the suggestion that it include internal adaptation in its receivers, such receivers would be fully "compatible" and could receive all signals in black-and-white, whether transmitted under the black-and-white standards or the new color standards.

Yet although RCA must have known since September 1, 1950, that it was at least likely that CBS standards would be adopted, RCA has refused to produce any internally adapted receivers. The Chairman of the Board of Directors of plaintiff RCA testified flatly that RCA did not plan [fol. 1037] to manufacture internally adapted sets unless the public demanded such sets and thus "prove that it (RCA) is wrong" (Tr. 10048-9, 10419-20, 10428). Thus, in effect, plaintiffs are complaining that their set sales are adversely affected because the Commission adopted an incompatible system. Yet plaintiff RCA refuses to protect itself by making *compatible* sets unless the public proves it is wrong. If, in fact, the public has lessened its buying of RCA sets, it has proven RCA to be wrong. RCA, nevertheless, continues to refrain from producing internally adapted sets; to produce them would, of course, deprive plaintiffs of their central argument against the CBS color system—viz., its incompatibility. Having made that choice, plaintiffs cannot now complain of any injury occurring from its own deliberately chosen course of action.

Nor is it a matter of speculation that the injury (if any) now suffered by plaintiffs in the form of a lessening of orders for its sets could have been, and can still be, avoided. Others in the industry, bent not on destroying the new color standards but rather interested in constructive steps to protect the public against obsolescence, have begun to make provisions for adaptation or conversion of existing standard black-and-white sets. Thus, for example, Muntz TV, Inc. has announced plans for prompt production of units

to convert to color their existing black-and-white sets; as a result, it has suffered no diminution of sales, but, on the contrary, following public announcement of such plans, its sales "doubled or tripled" (see the accompanying affidavit of Earl W. Muntz).

[fol. 1038] Similarly, the Dynamic Stores, a retail chain selling television sets, have widely advertised a guarantee that all sets sold by it would be adapted and converted as soon as possible for \$49.50. As a result, the day after such advertisements appeared, the sales by Dynamic of black-and-white receivers *tripled*. (See the accompanying affidavit of Oscar Katz.)

Clearly, therefore, if plaintiff RCA has experienced any diminution of orders for its receivers, it cannot complain. It could have protected itself; it can still protect itself. It prefers, however, to exacerbate the confusion and to aggravate the problem of incompatibility. This Court should not protect plaintiffs from the penalties of their own reckless course of conduct.

16. In sharp contrast to the unlikelihood and insubstantiality of the injury to the plaintiffs, and their power in any event to avoid injury, is the grave injury to the public which would be wrought by suspension of the Commission's order. Briefly stated, such public injury is the very injury which the FCC aimed to avoid by making its decision when it did, rather than delay it for some time as requested by RCA and other manufacturers. That public injury which suspension would cause arises out of the central fact of incompatibility—the inability of receivers now being offered on the market to receive the new color standards unless such receivers are either modified to receive the standards in black-and-white (i.e., adapted) or to receive them in color (i.e., converted).

[fol. 1039] The FCC itself has made decisive findings on this issue. In its First Report (attached as "Exhibit B" to plaintiffs' complaint), the FCC stated that:

"\* \* \* the mere passage of time overpowers the incompatible system by the sheer weight of receivers in the hands of the public" (Paragraph 148),

and that

"\* \* \* every day that passes would aggravate the compatibility problem" (Paragraph 151).

Similarly, in its Second Report (attached as "Exhibit G" to plaintiffs' complaint), the FCC concluded that:

"Nor have these manufacturers suggested any other method whereby the status quo as to compatibility can be maintained if a decision is postponed at the present time. Accordingly, we would be derelict in our responsibility to the public if we postponed a decision any longer. With no way of preventing the growth of incompatibility, the longer we wait before arriving at a final decision the greater the number of receivers in the hands of the public that will have to be adapted or converted if at a later date the CBS color system is adopted" (Paragraph 8).

And, in paragraph 15 of its Second Report, the Commission again emphasized the danger of delay, stating that the consequence of delay to consider new or "improved" compatible systems might be that "the increase in the number of receivers in the hands of the public would make it exceedingly difficult to adopt an incompatible system—a system which we know is satisfactory."

17. The reasons which impel prompt effectiveness of the Commission's order so as to avoid aggravation of the compatibility problem and hence injury to the public are simple and may be briefly stated:

[fol. 1040] (a) The most recent industry statistics show that standard black-and-white receivers, incapable of receiving the new color standards, are being produced at the rate of 800,000 a month. Unless adapted or converted *after* purchase, broadcasts under the color standards are lost altogether to these receivers; they cannot be received either in color or in black-and-white.

(b) To adapt receivers already purchased by consumers costs from \$32 to \$50, exclusive of installation costs. The cost of building the necessary additional circuits into a *new* receiver at the factory in order to adapt it (i.e., "internal adaptation") is substantially lower. (First Report, Paragraph 105.) Indeed, as already noted, RCA's own estimates of the retail cost of such internal adaptation is \$7-\$10.

(c) Similarly, there is a large difference between *converting* existing receivers and manufacturing new receivers with color equipment built into them. The

costs of conversion of 7-inch existing sets in order to produce a (magnified) 10-inch color picture are estimated at \$95 to \$130 (First Report, Paragraph 106). The total costs of an equivalent new combination color and black-and-white receiver are estimated at \$200 (Paragraph 111)—only about \$70 more than a black-and-white receiver (Tr. 3513, 3521, 9099).

(d) From the foregoing, the costs to the public involved in the failure to produce new internally adapted [fol. 1041] or new combination color and black-and-white sets can be roughly estimated. To adapt *after* purchase the 800,000 sets now being sold each month would cost \$25,600,000 to \$40,000,000, plus approximately \$8,000,000 additional for installation charges. The added cost involved to the public if such receivers were internally adapted at the factory is only \$5,600,000 to \$8,000,000. Thus the loss for *adaptation alone* totals between \$28,000,000 and \$43,600,000 *a month* to the public.

(e) Mere inertia, as well as the added costs just noted, will inevitably result in a substantial number of purchasers of standard black-and-white sets not adapting or converting their sets after purchase. Hence the audience for the color broadcasts will obviously be diminished below the size it would be if internally adapted receivers or receivers already capable of receiving color were on the market. This, in turn, will inevitably retard the expansion of color broadcasting and place additional obstacles in the way of its growth.

18. The injurious consequences described in the foregoing paragraphs 16 and 17 are likely to occur if the FCC's order is suspended as plaintiffs request. Only when the standards become officially effective will manufacturers focus their energies with confidence on the process of tooling up and producing internally adapted and new color sets. On the other hand, manufacturers will be likely to slacken their efforts if the FCC order should be suspended. [fol. 1041-a] That this is so is confirmed by the statement in a speech, broadcast on October 22, 1950, over the CBS network, by Robert C. Sprague, President of the Radio-Television Manufacturers Association, that:

"The recent color decision is now before a Federal court. And it will probably be some time before we



definitely know when or whether the CBS color system will actually be broadcast commercially."

Further, the issuance of a temporary injunction will obviously confuse the public, and is likely to be used by manufacturers and others as a means of propagandizing the public into the belief that there will be no color and hence the public can safely buy ordinary black-and-white sets without fear of obsolescence or added later expense. As already noted, such purchases would, in turn, aggravate the incompatibility problem—which plaintiffs so heavily emphasize—to the grave injury of the public interest.

19. In fact, the inference is inescapable that the real purpose of plaintiffs in seeking a temporary injunction is to fight a delaying action, to keep the public from seeing the new color system so that it can make its decisions as to purchase on a more informed basis, and hence to aggravate the incompatibility problem. Plaintiff RCA has proposed its own allegedly compatible system which was rejected by the Commission. As plainly appears from the "Petition of RCA" (Complaint, Exhibit E), plaintiff RCA is seeking delay in a desperate attempt to improve its own system and cure the fundamental defects inherent in it which the FCC found to exist. Its purposes will be furthered by suspension of the FCC order and by the consequent confusion and aggravation of the incompatibility situation. Thus RCA is using this litigation to accomplish precisely what the Commission warned against in Paragraph 148 of its First Report, where it stated:

"\* \* \* the Commission cannot overlook the obvious fact that one of the easiest methods of defeating an incompatible system is to keep on devising new compatible systems in the hope that each new one will mean a lengthy hearing so that eventually the mere passage of time overpowers the incompatible system by the sheer weight of receivers in the hands of the public."

Obviously, this Court will not lend itself to any such campaign against the public interest.

20. In respect of the allegations of the complaint that the Commission erroneously failed to reopen the hearing and the record to consider a certain document entitled "RCA Progress Report" dated July 31, 1950, and er-



roneously denied a petition by RCA dated October 4, 1950, requesting that the Commission decision be postponed until June 30, 1951, to permit RCA additional time further to develop and demonstrate its system, the following facts should be noted:

(a) The FCC hearing on the color issues closed on May 26, 1950; on June 26, 1950, the parties, including RCA, submitted proposed findings and conclusions; and on July 10, 1950, they submitted replies. RCA circulated its Progress Report on July 31, 1950, but it did not request that the hearing or record be reopened to include the report.

[fol. 1043] (b) On or about August 3, 1950, I received a carbon copy of a letter, dated August 2, 1950, signed by David Sarnoff, Chairman of the Board of Directors of plaintiff RCA and addressed to the Honorable Wayne Coy, Chairman of defendant FCC. A photostat of the carbon copy of said letter is annexed hereto as Exhibit B. In the said letter, General Sarnoff expressed opposition to any delay in the adoption of commercial standards for color television.

The foregoing facts give rise to the clear and obvious inference that RCA's petition of October 4, 1950, and its belated request for consideration of its July 31, 1950, "Progress Report" are mere afterthoughts—make-weights designed only to block the adoption of the new color standards. For General Sarnoff's letter opposing delay was written just after the date of the "Progress Report"; there was no hint in the letter that the record should be reopened to consider it. Indeed, the demand for prompt decision was wholly inconsistent with reopening of the record.

But, of course, on August 2, 1950, when RCA thus wrote opposing delay, RCA did not know that its system would soon be rejected, and that standards for a competing system would be adopted. On October 4, 1950, when it became apparent that the CBS system would be adopted, RCA suddenly abandoned its distaste for delay, and instead, demanded it as a matter of right. Clearly, therefore, plaintiffs' position is that delay is wrong if the decision is favorable to RCA, but delay is all right—and indeed required by law—if the decision is unfavorable to it.

[fol. 1044] Its conduct, thus, is transparent. No such double standard can be countenanced.

21. The allegation in Paragraph 77 of plaintiffs' complaint, alleging that on October 15, 1950, I broadcast a talk "to discourage people from buying present models of television receivers", is inaccurate. My discussion in the said broadcast, in so far as it relates to the question of purchase of television receivers, is set out in its entirety in Exhibit C, annexed hereto. It is obvious from a reading thereof that my talk was neither to encourage nor to discourage the purchase of existing sets. Rather it was to set out certain simple and undeniable facts which would help the consumer to make up his own mind on a more informed basis.

22. In the RCA "Comments" of September 28, 1950, attached to the complaint, plaintiffs repeatedly seek to establish that a report of the so-called Condon Committee is inconsistent with the findings and conclusions of the Commission, and hence the Commission was wrong—or at least, doubt is thrown on its findings and conclusions. A careful reading of the Condon Committee Report and the Commission's Reports will disclose the extent, if any, of these "inconsistencies", and hence it is unnecessary here to comment on them. Certain facts relating to the Report of the Condon Committee should, however, be noted in evaluating plaintiffs' contentions relating thereto.

First, the Condon Committee (officially named the "Advisory Committee on Color Television to the Committee [fol. 1045] on Interstate and Foreign Commerce—United States Senate") was created pursuant to a request of Senator Edwin C. Johnson, Chairman of the Senate Committee on Interstate and Foreign Commerce. That request, set forth in a letter from Senator Johnson dated May 20, 1949, appears in the Report, attached to Exhibit D of the complaint. Senator Johnson requested Dr. Condon to evaluate the "present-day practicability of color television."

As stated at pages 1-2 of the Report, the Committee's conclusions were based on the viewing of demonstrations. As stated at page 1, "The report is confined to technical factors \* \* \* No recommendation for the adoption of a specific system is given, since the committee believes that the decision to adopt a system must include consideration of many social and economic factors not properly the concern of the technical analyst."

While plaintiffs contend that the Condon Committee Report vitiates the FCC's Reports and orders, it is of first significance that Senator Johnson, at whose request the Condon Committee Report was prepared, and to whom it was submitted, had no such difficulties. On the contrary, as will be seen from Senator Johnson's comments, set out in full as Exhibit "D", Senator Johnson fully approved of the FCC action adopting the CBS standards; stating:

"\* \* \* that report (of the Condon Committee) said unequivocally and with finality that commercial operation of color television is here now.

[fol. 1046] "\* \* \* it (the FCC) also held that color television is a functioning, commercial reality which in the public interest should be made available to the people of this country now.

"The Commission is required by law to protect the public interest and promote technical advances in communications art. In my opinion, in this case it has met these responsibilities to the fullest extent possible."

Since, in the light of the Condon Committee Report, Senator Johnson himself thus unqualifiedly approved of the FCC action, plaintiffs are hardly in a position to attack the FCC action on the ground of alleged inconsistency with the Condon Committee Report. That Senator Johnson, for whom the Report was intended, saw no collision between the FCC action and the Condon Report robs plaintiffs' contentions on this score of any significance whatever.

Frank Stanton.

Sworn to before me this 10 day of November, 1950.  
Emily M. Green, Notary Public, State of New  
York. No. 31-6638100. Qualified in New York  
County. Certs. filed with N. Y. Co. Clk. & Reg.  
Commission Expires March 30, 1952. [SEAL]

[fol. 1047]

## EXHIBIT "A"

Statements of Manufacturers and Others in the Television Industry Concerning the Continuance of Black-and-White Broadcasting and the Delay in Production of Sets Capable of Receiving Color

[fol. 1048]

## EXHIBIT A-1

Excerpts from Statement of Robert C. Sprague, President, Radio-Television Manufacturers Association, Broadcast on October 22, 1950, Over CBS Network.

"Last Sunday, Mr. Stanton said that manufacturers are trying to create the impression, that the public's investment in television sets is about to be wiped out.

"I don't know any manufacturer who believes that. I don't know any manufacturer who has said anything like that. In fact, because of the many fine television programs that are coming on the air this fall, I believe that present black-and-white television sets are a better investment today than ever before.

"Mr. Stanton told you that some manufacturers are trying to create the impression, that the Commission's decision was sudden, and that, as a result, they are not prepared to build adapters, converters, and new color receivers.

"It is true, that the manufacturers could not believe—until it actually happened—that the Federal Communications Commission would approve a non-compatible color system. They believed—and still believe—that the action was unwise.

"But that isn't the only reason equipment isn't ready. Even minor changes in existing television receivers take six months to make; basic changes take much longer. [fol. 1049] Also, the increasing load, which national defense requirements are placing upon the industry's engineering and production talent, makes production changes even more difficult."

"As you can well imagine, during the past few days, a lot of people have asked me about the future of television. So I think I know the questions that are in your minds—and I



want to answer them by giving you the best judgment of the manufacturers. These are the men best qualified to know those answers.

"First, will present black-and-white programs continue? And, second, what programs will I get in color? and third, shall I buy the black-and-white set I had planned to buy now.

"There are two primary reasons why we believe black-and-white programs will continue to provide the best television entertainment for years to come. One is our profound conviction,—the FCC to the contrary notwithstanding—that the right kind of color television system simply isn't here yet. The second is an equally firm belief that black-and-white television will never be obsolete, even when a sound color system has been developed. As, black-and-white receivers will always cost less, they will appeal to many economy-minded persons. Moreover, the advertisers who sponsor most of the best television programs, will [fol. 1050] never, to any large extent, abandon this mass audience, in favor of a much smaller number of persons, who will be willing to pay extra for color.

"CBS has promised, it will broadcast 20 hours of color per week, but most of these broadcasts, apparently will be in fringe hours, when the average person is at work or asleep, and will not include the popular evening programs.

"And remember, that this broadcasting schedule, in all probability, will be undertaken by only one of the nation's 107 television stations, or at the most, by those affiliated with CBS.

"To my knowledge, no other television station has, as yet, indicated any intent or desire, to broadcast even *one* hour of color per week.

"The reason for their caution is, of course, that the CBS system is non-compatible with present black-and-white broadcasts. The minute any station puts on such a color program, it loses its entire audience for that period. Except for the people who will have bought adapters or converters, to tune in on the non-compatible color broadcast.

"Consequently, very few national advertisers, are likely to sponsor color broadcasts in commercially-valuable evening time, unless and until a substantial number of sets have been converted. Conversely, only a few viewers, [fol. 1051] with cash burning their pockets, are likely to

buy adapters and converters, until an appreciable number of the good programs are broadcast in color."

• • •  
"And finally, I tell my friends, that if they are interested in good reception of the better television programs, they can buy black-and-white sets now, with confidence that they will continue to receive these programs for many years to come."

EXHIBIT A-2

Photostat of Copy of Telegram Sent by Motorola, Inc.  
to Dealers (Name of Addressee Blacked Out)

October 12th-1950

COPY OF TELEGRAM FROM P. V. CALVIN, PRESIDENT  
MOTOROLA, INCORPORATED

THIS AFTERNOON THE FCC DECIDED TO FORMALIZE COLOR TELEVISION ON THE BASIC CBS STANDARDS. IF YOU HAVE BEEN FOLLOWING THE RECENT FCC PROCEEDINGS, THIS SHOULD COME AS NO GREAT SURPRISE.

WE FEEL THERE IS NOTHING ALARMING ABOUT THIS DECISION BECAUSE IT DOES NOT AFFECT TODAY'S BLACK AND WHITE TELEVISION. YOU MUST ALWAYS KEEP IN MIND THAT THE PUBLIC INCREASINGLY WELL SERVED BY TODAY'S BLACK AND WHITE TELEVISION STANDARDS AND PROGRAMS, AND WILL CONTINUE TO BE WELL SERVED BY THESE STANDARDS FOR A LONG TIME TO COME. SETS OF TODAY'S DESIGNS AND TODAY'S BLACK AND WHITE TELEVISION PROGRAMS WILL OBVIOUSLY REMAIN THE BACKBONE OF THE TELEVISION BUSINESS FOR AN EQUALLY LONG TIME. TODAY'S TELEVISION SETS REPRESENT A HUGE AND GROWING ADVERTISING CIRCULATION. ALL TELEVISION STATIONS DEPEND UPON THAT CIRCULATION. TODAY'S TELEVISION SPONSORS ARE INTERESTED IN ONLY THAT CIRCULATION. IT WILL BE A LONG TIME BEFORE STATIONS AND SPONSORS WILL FIND A COLOR TELEVISION AUDIENCE. IN FACT, QUOTING FROM PARAGRAPH 12 OF TODAY'S FCC REPORT, QUOTE IF BOTH TYPES OF RECEIVERS ARE OFFERED IT WILL BE THE FORCE OF COMPETITION WHICH GOVERNS WHETHER THE CUSTOMER BUYS COLOR OR BLACK AND WHITE, END QUOTE. I LEAVE IT TO YOU TO DETERMINE WHAT THE PUBLIC WILL CHOOSE CONSIDERING THE MANY DRAWBACKS OF COLOR TODAY, OBVIOUSLY THE GREAT PREDOMINANCE OF BLACK AND WHITE PROGRAMS AND BLACK AND WHITE ADVERTISING CIRCULATION MEANS THAT BLACK AND WHITE TELEVISION WILL PREDOMINATE FOR MANY YEARS TO COME.

FROM A TECHNICAL STANDPOINT SATISFACTORY COLOR TELEVISION ON THE CBS STANDARDS IS STILL A LONG WAY OFF. IT PRESENTLY DEPENDS ON A WHIRLING COLOR DISC TO PROVIDE A COLOR PICTURE. THIS DISC IS IMPRACTICAL FROM MANY STANDPOINTS AND LIMITS THE PICTURE SIZE TO A 12½ INCH TUBE OR LESS WHICH THE PUBLIC ALREADY REGARDS AS TOO SMALL.



THE SUCCESS OF COLOR TELEVISION ON CBS OR ANY OTHER SYSTEM DEPENDS ON THE DEVELOPMENT OF A TRI-COLOR TUBE WHICH DOES NOT EXIST TODAY. IT MAY BE YEARS BEFORE SUCH TUBES ARE COMMERCIALY PRACTICAL FROM A TECHNICAL AND COST STANDPOINT.

WHEN THE TRADE AND THE PUBLIC UNDERSTANDS THESE MANY RAMIFICATIONS OF COLOR TELEVISION AND WE WILL SEE THAT THEY DO UNDERSTAND THEM, THEN THEY WILL RECOGNIZE WHY BLACK AND WHITE TELEVISION WILL PRECAIL FOR A LONG TIME AND WHY THE EVOLUTION TO COLOR WILL REQUIRE A PERIOD OF YEARS.

THE PUBLIC HAS BEEN HEARING ABOUT COLOR FOR ALMOST TWO YEARS BUT THEY HAVE GONE ON BUYING PRESENT BLACK AND WHITE SETS IN HUGE QUANTITIES TO ENJOY TODAY'S BLACK AND WHITE PROGRAMS. WE ARE CONVINCED THEY WILL CONTINUE TO DO SO.

P. V. GALVIN, PRESIDENT, MOTOROLA, INC.

C O P Y

C O P Y



691

CLASS OF SERVICE DESIRED	
DOMESTIC	CABLE
WEEKDAY	ORDINARY
NIGHT LETTER	URGENT RATE
SERIAL	DEFERRED
NIGHT LETTER	NIGHT LETTER

Please check class of service desired; otherwise the message will be transmitted as a telegram or ordinary cablegram.

# WESTERN UNION

1207

JOSEPH L. EGAN  
PRESIDENT

\$	CHECK
	ACCOUNTING INFORMATION
	TIME FILED

ALL ADMIRAL DEALERS:

OCTOBER 16, 1950

FOLLOWING MESSAGE OF UTMOST IMPORTANCE. QUOTE, REGARDING RECENT FCC COLOR DECISION WE URGE YOU ACQUAINT YOUR CUSTOMERS WITH FACT THAT DECISION ALLOWS FOR CONTINUATION DUAL STANDARDS OF TELECASTING WHICH MEANS THAT PRESENT EXCELLENT PROGRAMMING WILL CONTINUE IN BLACK AND WHITE ON ALL FOUR MAJOR NETWORKS. IMPRACTICAL UNSIGHTLY WHIRLING DISC SYSTEM WHICH COMMISSION APPROVED WILL BE PUSHED ONLY BY CBS NETWORK OWNING FOUR STATIONS OUT OF A NATIONAL TOTAL OF 107. NO SPONSOR WILL MAKE ANY INVESTMENT COLOR TELECASTS FOR AUDIENCE WHICH WILL CONSIST MAINLY OF CBS EXECUTIVES. IT IS OUR PREDICTION CBS COLOR WILL BUMBLE ALONG FOR A FEW MONTHS AFTER WHICH TIME COMPATIBLE ELECTRONIC SYSTEM WHICH CAN BE UTILIZED BY PRESENT RECEIVERS WILL BE PERFECTED. THEN CBS RECEIVERS WILL BE COMPLETELY OBSOLETE. IN VIEW THESE FACTS WE URGE YOU REASSURE PUBLIC THAT COLUMBIA COLOR AND FCC'S ACTION MEANS LITTLE OR NOTHING TO HARM GROWTH OF TELEVISION AS WE KNOW IT. ADMIRAL IS PROUD OF WAY YOU TELEVISION DEALERS, AMERICA'S HARDEST HITTING SALES FORCE HAVE STEADILY INCREASED YOUR BUSINESS IN SPITE OF OBSTACLES BUREAUCRATS HAVE CONSTANTLY THROWN YOUR WAY.

ROSS D. SIRAGUSA, PRESIDENT, ADMIRAL CORPORATION, UNQUOTE.

THE KANE COMPANY

Photostat of Copy of Telegram Sent By  
Admiral Corporation to Dealers

EXHIBIT A-3

# Nobody is going to obsolete over 100 million dollars worth of TV

Why have over eight million families purchased television receivers? The answer is entertainment. Yes, the world's greatest entertainment—available night after night, day after day in an ever-growing cavalcade including drama, variety, comedy, music, news, sports, service and children's shows, costing over 100 million dollars a year. It's a fact that no other form of television can so richly reward its owners now or for a long time to come.

So buy your new TV set in confidence that nobody is going to obsolete 100 million dollars worth of TV entertainment. And be sure you see the newest from General Electric featuring life-size, real-as-life pictures at prices the average family can afford. Today, as always, you can put your confidence in General Electric.

## THE GREATEST SHOW ON EARTH Costing over 100 Million Dollars Is Yours on Today's TV!

### VARIETY

Tenace Star Theatre  
Teat of the Town  
Celine Comedy Hour  
Your Show of Shows  
Hit Parade  
Arthur Godfrey Talent Scouts  
Vaughn Monroe Show  
Little Show  
Benny Maid Varieties  
This Is Show Business  
Garraway of Large  
Mehawk Showroom  
Star Time  
Fred Waring Show  
Ken Murray Show  
Frank Sinatra Show  
Alan Young Show  
Shawnee U.S.A.  
Billy Rose Show  
Holiday Hotel  
Broadway Open House  
Jack Carter Show  
Cavalcade of Stars  
Paul Whiteman's Revue  
Don McNeill TV Club

### MYSTERY DRAMA

Treasury Man in Action  
Martin Kane Show  
Suspense  
The Web  
The Clock  
The Plainclothesman

### SPORTS

National Pro Football  
Gillies Cavalcade of Sports  
Ryder Derby  
Wrestling  
Stock Car Racing

### DRAMA

Frontside Theatre  
Ford Theatre  
The Goldbergs  
Big Story  
Armstrong Theatre  
Studio One  
Mama  
Lone Ranger  
One Man's Family  
Aldrich Family  
Gene Autry Show  
Philo Television Playhouse  
Robert Montgomery Presents  
Kraft Television Theatre  
Luz Video Theatre  
Pulitzer Prize Playhouse

### PARTICIPATION

Original Amateur Hour  
Stop the Music  
Break the Bank  
What's My Line  
Truth or Consequences  
Blind Date

### CHILDREN

Howdy Doody  
Super Circus  
Kukla, Fran & Ollie  
The Big Top  
Captain Video  
Smilin' Ed McConnell

### INTERVIEWS

Faye Emerson Show  
We the People  
Wendy Barrie Show



# A message from Stromberg-Carlson about color television

No doubt you have planned to buy a television receiver this fall—and now you are wondering about color.

Actually, there is not much to wonder about. The facts are simple:

- 1 For years to come the great programs on television will be in black and white.
- 2 Some day, color may also have a place in television programming, just as you now see some movies in color.
- 3 If and when color telecasting becomes a factor in your community, this supplementary broadcasting service can be received in color by adding a suitable converter to current Stromberg-Carlson television models.

Yes, you can buy today—with confidence. So why wait? Why pass up all the fine entertainment that is yours *right now*? Why not start tomorrow to enjoy the pleasure television will add to your family life?

*Robert E. Taylor*  
PRESIDENT

*In television . . . today or tomorrow . . .*

"There is nothing finer than a **STROMBERG-CARLSON**."

EXHIBIT A-6

Statement of William Balderston,  
President of Philco Corporation

October 16, 1950

WILLIAM BALDERSTON, PRESIDENT OF PHILCO, RELEASED FOR  
PUBLICATION THIS STATEMENT SENT TO ALL PHILCO DISTRIBUTORS:

"COLOR TELEVISION HAS NOT ARRIVED. MUCH CONFUSION AND  
MISINFORMATION HAVE RESULTED FROM THE EXAGGERATED PUBLICITY  
SINCE THE RECENT FCC ACTION. COLOR SIGNALS WILL BE ON THE  
AIR ONLY DURING FRINGE HOURS ON A LIMITED BASIS AND WILL  
IN NO WAY INTERFERE WITH THE ESTABLISHED PROGRAM SERVICE  
FROM THE 107 TELEVISION STATIONS THROUGHOUT THE COUNTRY  
TODAY. BLACK AND WHITE IS AND WILL CONTINUE TO BE THE  
BASIC SYSTEM OF COMMERCIAL TELEVISION FOR YEARS TO COME.

"WHILE THE COMMISSION HAS AUTHORIZED TRANSMISSION OF A  
COLOR SYSTEM, ITS REPORT LEAVES THE DOOR WIDE OPEN FOR  
FURTHER DEVELOPMENT. PHILCO BELIEVES THAT THE PRESENTLY  
PROPOSED SYSTEM WITH ITS AWKWARD MECHANICAL WHIRLING DISK  
AND SMALL SIZE PICTURES IS ENTIRELY UNACCEPTABLE TO THE  
PUBLIC AND THAT THE ONLY COLOR TELEVISION THE PUBLIC WILL  
BUY IN VOLUME IS THAT WHICH KEEPS PACE WITH CURRENT  
ELECTRONIC DEVELOPMENTS IN BLACK AND WHITE. THAT KIND OF  
COLOR WITH ITS BIGGER PICTURES, FINER QUANTITY AND  
PERFORMANCE IS BEING PERFECTED IN THE LABORATORIES OF THE  
INDUSTRY TODAY. IT IS OUR FIRM CONVICTION THAT THIS IS  
WHAT WILL EVENTUALLY REACH THE MARKET FOR DEALERS TO SELL  
WITH FULL ASSURANCE OF SATISFACTION TO THEIR CUSTOMERS.  
AND WE BELIEVE FURTHER THAT SUCH A COLOR SYSTEM IS AT  
LEAST TWO YEARS AWAY.



"YOU MAY ADVISE YOUR CUSTOMERS THAT THEY CAN PURCHASE PRESENT PHILCO TELEVISION RECEIVERS WITH THE KNOWLEDGE THAT, SHOULD THEY SO DESIRE AT ANY TIME, THESE CURRENT SETS MAY BE CONVERTED AT NOMINAL COST TO RECEIVE THE PRESENTLY-AUTHORIZED COLOR SIGNALS IN BLACK AND WHITE. IF AND WHEN COLOR PROGRAMS MAY WARRANT THE EXPENDITURE, EQUIPMENT FOR THESE SETS CAN BE MADE AVAILABLE AT HIGHER COST TO PERMIT RECEPTION OF THOSE PROGRAMS IN COLOR. SO YOUR CUSTOMERS CAN CONTINUE TO BUY PHILCO TELEVISION TODAY WITH THE FULL ASSURANCE THAT THEY WILL RECEIVE A COMPLETE TELEVISION SERVICE FOR THE FUTURE.

"YOU MAY FURTHER ADVISE YOUR DEALERS THAT WHILE MATERIAL SHORTAGES ARE BECOMING INCREASINGLY CRITICAL, WE ARE CONTINUING FULL SCALE PRODUCTION OF PHILCO TELEVISION SETS. WITH PUBLIC PREFERENCE FOR PHILCO AT AN ALL-TIME HIGH, WE MUST ALSO CONTINUE TO ALLOT OUR PRODUCTION ON AN ALLOCATION BASIS."

Advertisement of Raytheon Television  
(New York Times, October 23, 1950, p. 16)

PART OF A SERIES... Giving you THE TRUTH ABOUT TELEVISION—for people who now own television sets and those who plan to buy one soon

# WHAT ARE THE STRAIGHT FACTS ABOUT COLOR TELEVISION?

What's behind the recent FCC color decision? Why was the CBS color system selected at this time? Is the CBS system permanent or temporary? How will the FCC decision affect present TV sets? How much will it cost to convert present TV sets to color? Which programs will continue on black-and-white TV—which on color? Should you buy a new TV set now, or wait? How soon might color come?

These and many more questions are of vital importance today to the American public—and to dealers, distributors and manufacturers. All kinds of claims are being made. Nobody seems to agree. Everyone is confused.

The following questions and answers are published to help clear up the confusion, and to give you the facts you need to make up your mind. To the best of our knowledge and intent the information that follows is correct and contains no misleading statements.

**Q. What does the recent FCC color decision mean?**

**A.** The Federal Communications Commission's decision in favor of the CBS color system simply means that the Commission believes that the color system developed by the Columbia Broadcasting System is good enough to put on the air—and that any TV station that wants to can transmit color pictures using CBS standards. Technical specifications on how to send and receive color pictures. There is absolutely nothing in the decision to compel the broadcasters to transmit color television.

**Q. What is the CBS method?**

**A.** The Columbia Broadcasting System's method of color telecasting is a means of broadcasting color by transmitting each of the primary colors. To do this, they use a complicated optical device, which picks up these primary colors—red, blue and green—in the camera, one after the other, so the transmitter can send them over the air. Then, to receive a color picture, there must be a rotating color filter wheel in front of your TV screen, synchronized so that the correct color filter is in front of the picture tube at exactly the right time. Thus, red, blue and green pictures appear on your screen fast enough to blend together so that your eye sees them as a full color picture.

that color television is today where black-and-white television was in 1927. This might be right or wrong.

**Q. Is there a good chance that an all-electronic color system will come fairly soon?**

**A.** Frankly, while we don't know for sure, we believe it will. It is certainly appreciable. CBS has made an important contribution to color television. But, all most all electronic engineers believe that CBS color will be followed by an improved all-electronic system, just as the old whirling disk was followed by the present all-electronic black-and-white system. An all-electronic system could and certainly should be compatible—meaning color pictures could be received on black-and-white on present television sets without an adapter.

**Q. If the CBS method is temporary, why was it selected at this time?**

**A.** Right or wrong, the FCC felt that some sort of color television should be started now, whether or not it proved to be the final method. In addition they felt that any delay in the adoption of a non-compatible system might result in the obsolescence of even more sets than the 8,000,000 now in use. After examining the color systems of CBS, RCA and other television, the FCC decided

live in New York, color telecasting will naturally depend on what, if any, TV stations in your area decide to use the CBS method. Some CBS color programs will be put on the cable and may be re-broadcast by any CBS affiliate if they so desire. In any case, the color programs received will be experimental and unsponsored programs for some time to come. Your pleasure will have to come from color alone, not the caliber of the shows which you receive.

**Q. What effect will the color decision have on regular black-and-white telecasts?**

**A.** Not much, at least for several years. Your favorite programs will continue to be broadcast in black-and-white for a long time. Even CBS says that black-and-white TV and color TV will exist side-by-side for some time to come.

**Q. Will I still be able to see the top shows like Milton Berle, Bob Hope and Wayne King on black-and-white TV on my regular set?**

**A.** Yes, for at least several years. There won't be many color receivers for some time. And the CBS system is incompatible. It cannot be received by today's 8,000,000 TV receivers. Most advertisers cannot afford to pay for good shows that reach only a limited number of people; they must have large audiences for the greatest return on their investment.

**Q. Will my present TV set be able to receive black-and-white pictures from color programs if CBS starts telecasting them in my city?**

**A.** No. The CBS system is not compatible—which means that its color pictures can not be received on existing sets as a black-and-white picture.

some time to come. Why? Even CBS has indicated that it is not yet practical to produce a larger filter wheel. The filter wheel must be at least twice the size of the screen. Thus a 16-inch screen would need a wheel more than 3 feet in diameter, and the outside edge of such a whirling disk would travel approximately 162 miles per hour. Thus large screen sets (14-inch and up) which the public prefers must have their pictures reduced to 12½ inches by the converter. Right now you can't have both a large picture and color. Present indications are that the cost of such a conversion would not be less than \$200.

**Q. After I have had my set converted, have I any assurance that this will be the final color system?**

**A.** No. The CBS whirling disk in front of your screen may be replaced in a few years or may be sooner by a more efficient all-electronic and possibly compatible system.

**Q. Is there a color method being developed that is compatible—meaning I could receive color telecasts in black-and-white without any changes in my set?**

**A.** Yes, several methods are in process of development that would do just that. They're called "all-electronic"—require no mechanical filter wheels, are not limited by picture size, and are compatible to present black-and-white standards, i.e., you could receive color telecasts in black-and-white with no adapter necessary. Two of these methods use special "Tri-color Tubes" and appear to offer several advantages. Both eliminate the bulky rotating wheel now necessary in a CBS converter. You can get a larger color picture—16 inches or more. Certain problems such as limited brightness, richer and rainbow band edges of moving pictures are eliminated.

**Q. Should I buy a TV set now or wait for a color set?**

**A.** That's entirely up to you. If you are an adventurous soul and are willing to spend your money on what may turn out to be an expensive experiment, then wait for one of these color sets which may be available next year. If you do, probably for an hour or so in the early afternoon or late evening there will be some color

telecasting on a sustaining basis. Top-notch programs will continue to come through as black-and-white pictures. However, if you want high-grade entertainment, which will be predominant on TV for several years to come, and will choose a TV set that has achieved a high degree of perfection in performance and dependability, by all means go ahead and buy today's TV set—one from a reliable manufacturer.

**Q. What is Raytheon going to do?**

**A. Naturally, we are following a flexible policy—**

- (1) We will continue to make TV sets that give you excellent black-and-white pictures. These sets, however, will be provided in the near future with a plug connection for an adapter or converter.
- (2) We have the design of an adapter in process, which can be connected to these sets simply by plugging in. It should be in production during the first half of next year.
- (3) For Raytheon sets manufactured since Jan. 1, 1950, we will have a "field kit" containing connection plug and other necessary parts, which your Raytheon serviceman can install on your set for a small fee.
- (4) We will market a color converter as soon as the programming and public acceptance of color makes such a course feasible.
- (5) When and if the public demands it, Raytheon will produce a full-color set.

We choose this policy because it eliminates any possibility of obsolescence of Raytheon sets now in use, and it assures complete adaptability of any future Raytheon sets to existing conditions.

Since you, the consumer, will have to live for probably 25 to 30 years with the standards that are finally adopted by the Federal Communications Commission, we insist that the best possible color standards be adopted. We do not believe that the present CBS method is the final answer.

★ ★ ★



[fol. 1060]

## EXHIBIT A-8

Other Statements Reported in "Broadcasting-Telecasting"  
(a leading trade magazine), October 23, 1950

"J. R. Poppele, vice president WOR-TV New York and president of Television Broadcasters Assn., said, it 'may take some years' before color television can 'attain the magnitude of the present black-and-white service.'

" 'Adoption by the FCC of standards for color television in no way interferes with the continued broadcast of black-and-white television programs by the nation's 107 television stations. . . .

" 'At the present time only one of the 107 television stations is equipped to transmit color images on the basis of the new standards. The number of color television sets or converters and adapters (which are required for color reception on present sets) currently on the market are less than 100. . . . It may take some years before color television can attain the magnitude of the present black-and-white service, which is reaching 35 million people in 65 of the nation's leading markets. Conversion to color is required both in the studio and receiver. Both will be gradual. The process may be slowed by the exigencies of the present national emergency. . . .

"E. K. Jett, director of television, WMAR-TV Baltimore and formerly chief engineer and member FCC, answered the question: 'Shall I buy a TV set now?' with an emphatic 'Yes.' 'Later, but not soon,' he added, 'you might have to buy a small attachment to receive color programs as black-and-white pictures.' No station has been ordered [fol. 1061] to transmit color, he said, and no color equipment, transmitting or receiving, is available at this time in the Baltimore area. However, he pointed out, it would be possible for all three of Baltimore's TV stations to transmit color programs from New York where CBS is equipped to originate and feed color signals to Baltimore by coaxial cable."

"George B. Storer, president Fort Industry Co., warned a group of television dealers and distributors that color TV is still a long way in the future and the 'color situation should not stop them (the public) from buying a receiver now if they want one.' 'I don't mean to deprecate color



telecasting,' he continued, 'but every effort will be for better black-and-white pictures for local set owners. The very limited color programs we will carry will be for the "hams" or amateurs who want to experiment with their own receivers, but in no way will upset our programming in black-and-white pictures.'"

"Arthur A. Brandt, general sales manager, General Electric Receiver Division, told dealers black-and-white television programs will remain the backbone of the TV business for many years to come and color television will be supplementary and probably limited to one station in New York City for an indefinite period. 'No one knows how long it will take to engineer, develop and produce the highly complicated television station equipment needed to originate color telecasts outside New York, he continued. 'While conversion is possible we do not believe that many people [fol. 1062] will want to convert their sets until color broadcasts offer a real added service,' he said. Color sets will be considerably higher in cost, he pointed out."

"Leonard Ashbach, president, Majestic Radio & Television, said his company would build adapters and converters as soon as there is public demand for them and as soon as components are 'readily available.' Mr. Ashbach said there was no need for haste in the matter because 'even if CBS color goes on the air next week it will be at least two to three years before color telecasts will measure up with the quality of entertainment that we now enjoy on black-and-white receivers.' He said prospective television buyers need not hesitate to purchase present black-and-white sets 'because TV stations will continue to telecast black-and-white programs as long as sponsors are willing to pay for same.'"

[fol. 1063]

## EXHIBIT B

Letter from David Sarnoff to Honorable Wayne Coy,  
August 2, 1950

RADIO CORPORATION OF AMERICA

RCA Building,

30 Rockefeller Plaza, New York 20, N. Y.

August 2, 1950.

Copy

The Honorable Wayne Coy, Chairman, Federal Communi-  
cations Commission, Washington, D. C.

DEAR CHAIRMAN COY:

We write with reference to the color television matter which is pending before the Commission.

Items have appeared in the trade press that there are those who are in favor of delay in the disposition of this matter by the Commission.

On behalf of RCA and NBC we wish to reiterate that we have not and do not favor any delay in the establishment, by the FCC, of commercial standards for color television.

Sincerely yours, Radio Corporation of America. By  
David Sarnoff, Chairman of the Board.

[fol. 1064]

## EXHIBIT C

Excerpts of October 15, 1950, Broadcast Relating to Purchase of New Sets

. . .

"First, as I have already pointed out, present sets can be adapted at reasonable cost to give black-and-white pictures from color broadcasts.

"Second, all future black-and-white sets can be manufactured at an even lower added cost to provide built-in compatibility for every future purchaser. You who are concerned with compatibility and want to buy a black-and-white

set after the next month or so may well want to insist that the set you buy includes this feature."

. . .

"This leaves just one more question which I am sure many of you are asking:

'Should I buy an ordinary black-and-white television set at this time?'

I cannot give you a flat answer, because the answer may vary with your preferences and your pocket-book. But I can give you some facts which may help you make up your own mind.

"The first fact is that present black-and-white sets now on the market will continue to receive present black-and-white programs. These programs will continue for a considerable period of time, although at a diminishing rate within a year or so.

[fol. 1065] "The second fact is that most sets now on the market can be adapted, so that when there is color broadcasting, the program will be received in black-and-white. And, of course, the sets can be converted to receive color broadcasts in color.

"Therefore, if the manufacturers give you their word that there will soon be available adapters and converters for the particular black-and-white sets which you are considering, you will have protection against obsolescence.

"On the other hand, I want to point out that it will be somewhat cheaper and more satisfactory to buy a black-and-white set which is already adapted, so that it has built-in compatibility. Furthermore, a new combination color and black-and-white set may be somewhat less expensive and will be more satisfactory than an ordinary black-and-white set adapted and converted for color.

"Therefore, if you wait for, say, six months, you may save some money, and you will have a self-contained set with built-in compatibility and built-in color. On the other hand, if you buy an ordinary black-and-white set now, you will be able to enjoy the black-and-white programs being broadcast. But, if you do buy such a set, buy only from a manufacturer who will give you positive assurance that there will soon be adapters and converters which will enable you to get color."



[fol. 1066]

## EXHIBIT D

Statement (Oct. 19, 1950) of Senator Edwin C. Johnson, Chairman, Senate Committee on Interstate and Foreign Commerce.

"Concerned with the highly technical nature of the controversy over color television, eighteen months ago the Senate Committee on Interstate and Foreign Commerce called on the National Bureau of Standards to advise the Congress, and through Congress the people of the United States, on the scientific status of color television. Accordingly, Dr. Edward U. Condon, Director of the Bureau, appointed a committee of five impartial, highly qualified scientists of recognized ability, to study every phase of the problem and prepare a report. That committee of scientists examined every proposed system of color television, conferred with electronic experts, analyzed the nine months of testimony before the Federal Communications Commission and personally witnessed field and laboratory demonstrations of various systems, and in July of 1950 submitted its report. That report said unequivocally and with finality that commercial operation of color television is here now.

"On September 1 of this year, two months after the report of this expert committee had been filed and after nine months of exhaustive hearings and demonstrations, the Federal Communications Commission issued its first order in the color television case. It also held that color television is a functioning commercial reality which in the public interest should be made available to the people of this [fol. 1067] country now. Of the three principal systems considered, the Commission found that Columbia's was the best that had been demonstrated. It proposed therefore to adopt standards for color television premised on Columbia's system, but to leave the door open to the development of competing color television systems and added that if television set manufacturers would build new sets capable of receiving Columbia's color signals, it would hold in abeyance a final order adopting the Columbia system.

"However, instead of going along with the commission and cooperating sympathetically in solving a most difficult problem the manufacturers organized a sit-down strike. The obvious and sensible thing, of course, would be for

# worth of TV entertainment!

*You can put your confidence in—*

**GENERAL  ELECTRIC**

Frank Sinatra Show  
Alan Young Show  
Showtime U.S.A.  
Billy Rose Show  
Holiday Hotel  
Broadway Open House  
Jack Carter Show  
Cavalcade of Stars  
Paul Whiteman's Revue  
Don McNeill TV Club

#### MYSTERY DRAMA

Treasury Men in Action  
Martin Kane Show  
Suspense  
The Web  
The Clock  
The Plainclothesman

#### SPORTS

National Pro. Football  
Gilliam Cavalcade of Sports  
Baller Derby  
Wrestling  
Stock Car Racing

Lux Video Theatre  
Pulitzer Prize Playhouse

#### PARTICIPATION

Original American Hour  
Step the Music  
Break the Bank  
What's My Line  
Truth or Consequences  
Blind Date

#### CHILDREN

Howdy Doody  
Super Circus  
Kukla, Fran & Ollie  
The Big Top  
Captain Video  
Smilin' Ed McConnell

#### INTERVIEWS

Faye Emerson Show  
We the People  
Wendy Barrie Show

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them to abandon their political activity and their announced propaganda campaign and put their heads together to develop a color television system more to their liking. No one can make me believe that they cannot do so should they pool their great scientific resources. Since no assurances were forthcoming from the manufacturers that such sets would be built and made available for purchase by the public, at the conclusion of the thirty day period set by the Commission it issued its second report. As I understand this second order, it has these present and future implications:

"1. The broadcasting of color television for the present is to be permissive and not mandatory. Consequently color programs will be available only over a relatively few stations [fol. 1068] and then largely during the hours of the day when existing major black and white programs are not on the air.

"2. It does not require stations to broadcast a specific minimum amount of color programs which would require a further long drawn out rule-making hearing and meanwhile the permissive arrangement would enable the Commission to see how color television is received by the public.

"3. The Commission's second order like its first does not close the door to the development, or the authorization, of other color systems, compatible or otherwise. To the contrary, the Commission emphasizes that it stands ready and willing to give the fullest consideration to improvements or new systems whenever they may be developed.

"4. Since the Commission's order permits the operation of both color and black-and-white, with the latter obviously remaining the prevailing system on most stations, the market is left wide open for a free choice by buyers giving the scientific, industrial, and competitive elements free play to settle the issue. This is in the best traditions of the American anti-monopoly, free enterprise system.

[fol. 1069] "5. The hue and cry is that by the end of this year about 10,000,000 black-and-white sets will be in use and their owners will either have to buy converters and adapters or not receive color broadcasts. The only way the Commission's order affects them is to make it possible for them to have color television if they want it. What is so wrong about that? The Commission's decision obviously is designed to give consideration to approximately 75 per-



cent of the population of this country. It must be remembered that 60 percent of our people reside in areas where there is no television at all. Moreover, even in the area where there is now television, approximately two-thirds of the families still do not have sets. Why should they be denied the right to purchase sets capable of receiving color television if they want to do so? The Commission is required by law to protect the public interest and promote technical advances in the communications art. In my opinion, in this case it has met these responsibilities to the fullest extent possible.

"It should be noted that the Commission is now going forward with its television channel allocation hearings, which when completed, will result in lifting the existing freeze on new stations. This will open up a vast new market, six to twelve months hence when hundreds of new stations will begin operation in areas where now there is no television. The viewers in those sections are entitled to be able to buy sets which will allow them to receive color programs if they want that kind of a set and the new broadcasters in the new areas are entitled to be able to buy and install color [fol. 1070] broadcasting equipment if that is their wish. I repeat, for the present the Commission's order is permissive and is not mandatory."

"Stripped of all the cooked-up hurricane of confusion the Commission's orders merely insist upon a 'buyers choice'. Always there has been resistance to new things by selfish interests but always, thanks be to progress and Providence, that opposition has been brushed aside and the people have been served."

[fol. 1071] IN THE UNITED STATES DISTRICT COURT

[Title omitted]

AFFIDAVIT OF HERBERT V. AKERBERG—Filed November 13, 1950

STATE OF NEW YORK,

County of New York, ss:

Herbert V. Akerberg, being duly sworn, deposes and says:

1. I am Vice-President of the Columbia Broadcasting System, Inc., in charge of station relations. In this ca-

capacity, I directly supervise relations between the CBS television network and the television stations which are affiliated with CBS and which carry its network programs. My functions include supervision of negotiations on behalf of CBS with such stations in respect of which network programs, if any, such stations will carry originated by CBS.

2. On November 2 and 3, 1950, I consulted by telephone with a number of CBS television affiliates in various cities in order to offer to such stations the color programs which CBS will broadcast beginning November 20, 1950. Beginning on that date, the following color broadcast schedule will be made available to CBS affiliates connected by coaxial cable:

*Monday through Saturday*—11:00 AM-1:00 PM; 6:00 PM-6:30 PM; 11:30 PM-Midnight;

*Sunday*—11:00 AM-1 PM; 11:30 PM-Midnight.

The foregoing schedule was offered to various stations in whole or in part. In order for these stations to broadcast these color programs transmitted via the coaxial cable, it will be necessary in each instance for the station to procure and install:

- (1) a color monitor,
- (2) a hum depresser, and
- (3) a number of color receivers.

In general, delivery of such equipment is approximately 45 days from date of order.

3. As a result of my conversations on November 2 and 3 with representatives of the various television affiliates, it appears that the following stations will carry the following color programs:

a. *Washington, D. C.* As a result of arrangements with John Hayes, Vice-President and General Manager of [fol. 1073] WTOP-TV, Washington, D. C., that station will, beginning November 20th, broadcast the CBS color programs in Washington between 11:00 AM and 1:00 PM daily, except Sunday. CBS will furnish WTOP-TV sufficient equipment plus four color receivers until such time as WTOP-TV procures its own equipment. WTOP-TV plans to locate the receivers at such places as will make it pos-

sible to demonstrate the color broadcasts to the greatest number of viewers possible.

b. *Baltimore, Maryland.* Arrangements have been made with E. K. Jett, Vice-President and General Manager of WMAR-TV in Baltimore, Maryland, to broadcast as large a portion as possible of the CBS 11:00 AM to 1:00 PM color schedule. WMAR-TV will carry the entire two hours whenever its black-and-white broadcasting schedules permit. However, because of unavailability of equipment, WMAR-TV will not begin broadcasting color by that date. The station has ordered the necessary equipment and during the interim period before actual delivery, CBS will endeavor to furnish temporary equipment to WMAR-TV. Such temporary equipment cannot be supplied until at least two or three weeks after November 20th.

c. *Philadelphia, Pennsylvania.* As a result of conferences with J. L. Tinney, Assistant General Manager of WCAU-TV, the same arrangements have been made with that station as have been made with WMAR-TV in Baltimore. WCAU-TV has ordered permanent equipment.

d. *Boston, Massachusetts.* Through arrangements with Linus Travers, Executive Vice-President and General [fol. 1074] Manager of WNAC-TV Boston, Massachusetts, substantially the same schedule is contemplated as for WMAR-TV and WCAU-TV. WNAC-TV will carry the CBS color broadcasts for one hour, probably between 12:00 noon and 1:00 PM.

e. *Cincinnati, Ohio.* Through arrangements with E. A. Latham, Station Manager, WKRC-TV will carry some part of the CBS 11:00 AM to 1:00 PM color schedule as soon as equipment now on order has been delivered and installed.

f. *Dayton, Ohio.* Through arrangements with J. Leonard Reinsch, General Manager, WHIO-TV will broadcast some part of the CBS 11:00 AM to 1:00 PM color schedule as soon as equipment can be delivered and installed.

g. *Louisville, Kentucky.* Through arrangements with Victor Sholis, Director, WHAS-TV will broadcast some part of the CBS 11:00 AM to 1:00 PM color schedule as soon as equipment can be delivered and installed.

h. *Chicago, Illinois.* As a result of arrangements made by William A. Schudt, Director of Station Relations, with John H. Mitchell, General Manager, WBKB, Chicago,



Illinois, will broadcast one-half hour daily of the CBS 11:00 AM to 1:00 PM color schedule and will also broadcast the CBS color program between 6:00 and 6:15 PM each day. In addition, WBKB wishes to install sufficient color pickup equipment to enable that station to originate color programs in Chicago and supply them to the network. The starting date for the foregoing schedule is dependent on the delivery of necessary transmitter equipment.

[fol. 1075] i. *Detroit, Toledo, Atlanta.* As a result of arrangements with George B. Storer, President, Fort Industry, Inc., the stations owned and operated by that company in Detroit, Toledo and Atlanta will broadcast an unspecified portion of the CBS color schedule when equipment becomes available.

In each of the cities listed in the foregoing paragraph, the stations plan to install several television receivers in public places and in department stores for the purposes of public demonstrations. The stations other than WTOP-TV in Washington and WMAR-TV in Baltimore will probably not be on the air with CBS color broadcasts until 45 days to two months from the present—the time necessary to procure equipment. It is my opinion that within two to four months from the present, approximately 20 CBS interconnected television affiliates will be broadcasting some or all of the CBS color network schedule.

Herbert V. Akerberg:

Sworn to before me this 10th day of November, 1950.  
Emily Green, Notary Public, State of New York;  
No. 31-6638100, Qualified in New York County.  
Certificate filed with N. Y. Co. Clerk and Register.  
(Seal.)

Commission expires March 30, 1952. ✓

[fol. 1076] IN THE UNITED STATES DISTRICT COURT

[Title omitted]

AFFIDAVIT OF OSCAR KATZ—Filed Nov. 13, 1950

STATE OF NEW YORK,  
County of New York, ss:

Oscar Katz, being duly sworn, deposes and says:

1. I am Director of Research of Columbia Broadcasting System, Inc. I make this affidavit in opposition to the claim of plaintiffs that unless the FCC order adopting standards for color television broadcasting is temporarily enjoined, RCA as manufacturer and RCA Victor Distributing Corporation as distributor, will suffer irreparable damage through loss of sales.

2. I have closely followed the effect of the FCC color television decision of October 10, 1950, on the retail sales of black-and-white television receivers in major markets throughout the country. At my direction, spot shopping surveys have been made; dealer and distributor reaction sampled; and a thorough distillation was made of major newspapers and television trade journals for data and facts.

3. The evidence thus obtained is analyzed in detail, with exhibits hereinafter. It may be summarized as follows:

[fol. 1077] (a) On September 18, 1950, a moderate credit control regulation (Regulation W, issued by the Federal Reserve Board) went into effect, covering television receivers, among other items, and requiring:

- (1) a minimum down payment of 15%; and
- (2) a maximum installment period of 18 months.

(b) On October 11, 1950, the FCC color television decision was announced, adopting standards for the field sequential system and thus authorizing the beginning of commercial color broadcasting on November 20, 1950.

(c) On October 16, 1950, the Federal Reserve Board tightened its credit control regulations (the coverage including television receivers) and thenceforth required:

- (1) a minimum down payment of 25% (instead of 15%); and

... opinion believe that the color system developed by the Columbia Broadcasting System is good enough to put on the air—and that any TV station that wants to can transmit color pictures using CBS' standards' technical specifications on how to send and receive color pictures. There is absolutely nothing in the decision to compel the broadcasters to transmit color television.

#### Q. What is the CBS method?

A. The Columbia Broadcasting System method of color-televesting is a means of broadcasting color by transmitting each of the primary colors. To do this, they use a complicated optical device which picks up three primary colors—red, blue and green—in the camera, one after the other, as the transmitter can send them over the air. Then, to receive a color picture, there must be a rotating color filter wheel in front of your TV screen, synchronized so that the correct color filter is in front of the picture tube at exactly the right time. Thus red, blue and green pictures appear on your screen fast enough to blend together, so that you see them as a full color picture.

#### Q. Is the present CBS method final and permanent... or temporary?

A. Nobody knows for sure—it may well be temporary. The FCC's decision permitting the use of the CBS method does not stop other and better methods from being developed and eventually being put into common use by the entire industry. As a matter of fact, the FCC made this point very clear.

#### Q. Is the CBS color system the most advanced that can reasonably be expected?

A. While in the opinion of the FCC the CBS system gives the most faithful color picture today, most electronic engineers feel that a better system will be developed. The RCA system, for instance, already has many advantages and recent developments indicate an early solution to the reasons why the FCC rejected it. The FCC has not shut the door to a new system. The CBS color system uses a mechanical color scanner—a rotating color disk. Back in 1927 regular black and white television also used a rotating disk with holes punched in it. If a true color picture was produced, the pictures were as simply poor by present day standards. The whirling disk with its disappointing picture was soon replaced by the present "all-electronic" television system with its fine, clear, steady pictures. One electronic expert has said

#### all-electronic color system will come fairly soon?

A. Frankly, while we don't know for sure, we believe it will. It is certainly a possibility. CBS has made an important contribution to color television. But almost all electronic engineers believe that CBS color will be followed by an improved all-electronic system. Just as the old whirling disk was followed by the present all-electronic black-and-white system. An all-electronic system could, and certainly should be compatible—meaning color pictures could be received in black-and-white on present TV sets without an adapter.

#### Q. If the CBS method is temporary, why was it selected at this time?

A. Right or wrong, the FCC felt that some sort of color television should be started now, whether or not it proved to be the final method. In addition they felt that any delay in the adoption of a non-compatible system might result in the obsolescence of even more sets than the 8,000,000 now in use. After examining the color systems of CBS, RCA and Color Television, Inc., the FCC decided that the CBS system reproduced color more faithfully than the others in their present state of development. This, in the opinion of five of the seven members of the FCC, dissenting were Commissioners Sterling and Hennock, outweighed the fact that the other color systems gave pictures which, in the opinion of experts, had better detail and less flicker, were all-electronic and compatible—meaning color pictures could be received in black-and-white on present TV sets without an adapter.

#### Q. Who will telecast color pictures?

A. From present indications, it appears that only the Columbia Broadcasting System will transmit color pictures using the CBS method, at least for the time being. The other networks, NBC, ABC and Dumfries, have not indicated that they intend to do any color telecasting using the CBS method.

#### Q. How soon will there be color telecasting in my area?

A. If you live in New York City, WGBS-TV, the only station in the United States now equipped to initiate color telecasts, expects to start 20 hours of color telecasting a week on November 20, 1950, probably at "off" hours, day time and late evenings. But even in New York, the top programs, including those of CBS, will undoubtedly be on black-and-white TV for several years. If you don't

Your favorite programs will continue to be broadcast in black-and-white for a long time. Even CBS says that black-and-white TV and color TV will exist side-by-side for some time to come.

#### Q. Will I still be able to see the top shows—like Milton Berle, Bob Hope and Wayne King—on black-and-white TV on my regular set?

A. Yes, for at least several years. There will be many color receivers for some time. And the CBS system is incompatible, it cannot be received by today's 8,000,000 TV receivers. Most advertisers cannot afford to pay for good shows that reach only a limited number of people—they must have large audiences for the greatest return on their investment.

#### Q. Will my present TV set be able to receive black-and-white pictures from color programs if CBS starts telecasting them in my city?

A. No. The CBS system is not compatible—which means that its color pictures can not be received on existing sets as a black-and-white picture.

#### Q. How can existing sets be changed to pick up color broadcasts in black-and-white?

A. By adding an "adapter" to the set, providing the set manufacturer makes such an adapter available. The adapter, which contains tubes, condensers and resistors, will come in a little box which may be wired to the set. It will, according to most manufacturers, cost probably \$60 to \$100 and perhaps \$10 to \$15 for a serviceman to install.

#### Q. How good will black-and-white pictures be from a CBS color telecast?

A. Frankly, not so hot. They will have only about 1/3 the detail of the regular black-and-white pictures. That's because the CBS color system adopted by the FCC has basic limitations that result in less efficient use of the channel space than that of the black-and-white system.

#### Q. Can my present TV set be "converted" to receive CBS color and what will it cost?

A. Yes, in many cases it can—if the manufacturer of your set provides a complete color converter which includes an adapter and a mechanical filter wheel. However, you won't be able to get color pictures any larger than 12 1/2 inches for

#### have I any assurance that this will be the final color system?

A. No. The CBS whirling disk in front of your screen may be replaced in a few years or maybe sooner by a more efficient all-electronic and possibly compatible system.

#### Q. Is there a color method being developed that is compatible—meaning I could receive color telecasts in black-and-white without any changes in my set?

A. Yes, several methods are in process of development that would do just that. They're called "all-electronic"—require no mechanical filter wheels, are not limited by picture size, and are compatible to present black-and-white standards. In fact, you could receive color telecasts in black-and-white with no adapter necessary. Two of these methods use special "Tri-color Tubes" and appear to offer several advantages. Both eliminate the bulky rotating wheel now necessary in a CBS converter. You can get a larger color picture—16 inches or more. Certain problems such as limited brightness, flicker and rainbow-hued edges of moving objects, all inherent to the CBS system, are corrected in these systems. One system, RCA's, is now said to be in the state of engineering finalization. It still, however, has to be tested and approved by the FCC, who previously rejected it on the basis of lack of faithful reproduction of colors.

#### Q. If I bought a color set using the CBS mechanical method—and if later one of the "all-electronic" methods were adopted by the FCC as a standard—would that color set become obsolete?

A. That portion of the color set that brings you the pictures in color might become obsolete. However, the other portion of the set—that which produces black-and-white pictures under the present standards—would continue to serve you, and would even get the all-electronic color programs in black and white.

#### Q. Are today's TV sets about to become useless and obsolete?

A. Heavens, no! Black-and-white pictures will continue to be predominant for years and years. Advertisers now reaching an audience of many millions daily and the figure is leaping every month will not spend their money on expensive color programs for the public's enjoyment until there is a big enough audience to see and hear their message.

(1) We will continue to make TV sets that give you excellent black-and-white pictures. These sets, however, will be provided in the near future with a plug connector for an adapter or converter.

(2) We have the design of an adapter in process, which can be connected to these sets simply by plugging in. It should be in production during the first half of next year.

(3) For Raytheon sets manufactured since Jan. 1, 1950, we will have a "field kit" containing connection plug and other necessary parts, which your Raytheon serviceman can install on your set for a small fee.

(4) We will market a color converter as soon as the programming and public acceptance of color makes such a course feasible.

(5) When and if the public demands it, Raytheon will produce a full-color set.

We choose this policy because it eliminates any possibility of obsolescence of Raytheon sets now in use, and it assures complete adaptability of any future Raytheon sets to existing conditions.

Since you, the consumer, will have to live for probably 25 to 30 years with the standards that are finally adopted by the Federal Communications Commission, we insist that the best possible color standards be adopted. We do not believe that the present CBS method is the final answer.



Those are the facts as most television experts see them. We hope they will help you make up your mind on what to do about the color TV problem.

Actually, it boils down to this. If you want to enjoy top-flight television programs in black-and-white for the next year or two, buy your TV set now. If you want to enjoy good TV programs now, and want color later, buy a set that can be easily adapted to color. If you want the final, permanent color system—wait several years before you buy. By then, the chance are there will be an all-electronic color TV system—one that may be compatible—that will satisfy everyone, and you in particular.

If we can be of further help to you, please drop us a line. We'll try to answer your questions. And won't you please help us by filling out the simple questionnaire printed below and mailing it to us? Thanks!

### 60-Second Questionnaire—Fill Out and Mail Today PLEASE TELL US WHAT YOU THINK—

Like every manufacturer, we at the Raytheon Manufacturing Company want to make what you, our valued customers, want. Our job is to serve you. After reading the facts on this page, we would greatly appreciate your answering the few simple questions below. Write your answers in soft pencil, tear out this form and mail it to us.

#### IF YOU OWN A TV SET ANSWER THESE QUESTIONS:

1. In general, how do you feel about color TV?  
☐ Enthusiastic ☐ Can take it ☐ Don't want it or leave it
2. Would you install an adapter right now that would cost up to \$80.00 in order to see as much as possible to get color pictures in black-and-white?  
☐ Yes ☐ No
3. Do you plan to install an adapter and a converter that would cost up to \$200.00 in order to see as much as possible to get full-color pictures?  
☐ Yes ☐ No
4. Concerning the color TV set you buy, will you:  
☐ Buy a regular TV set without regard to color?  
☐ Buy a regular TV set as soon as it can be easily adapted to get color?  
☐ Wait several years until color is perfected and standardized?

#### IF YOU DON'T OWN A TV SET ANSWER THESE QUESTIONS:

1. In general, how do you feel about color TV?  
☐ Enthusiastic ☐ Can take it ☐ Don't want it or leave it
2. Concerning the color TV set you may buy, will you:  
☐ Buy a regular TV set without regard to color?  
☐ Buy a regular TV set as soon as it can be easily adapted to get color?  
☐ Wait several years until color is perfected and standardized?

#### FOR OWNERS AND NON-OWNERS

1. Please make any comment you wish to:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Please fill in your name and address, unless you prefer not to:

NAME \_\_\_\_\_  
STREET \_\_\_\_\_  
CITY \_\_\_\_\_ STATE \_\_\_\_\_

Thank you  
for your help

Mail to: RAYTHEON, Public Service Division  
3921 West Dickens Avenue, Chicago 39, Illinois

## A word about RAYTHEON

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General Electric Appliances • Toastmaster Products



(2) a maximum installment period of 15 months (instead of 18 months).

(d) There was *some* decrease in TV receiver sales in *some* cities and markets for a period of about 10 days following October 16. It varied greatly. In no market was it uniform. It clearly appears to have been a small, temporary, sporadic decline in sales followed by recoveries, with a new decline indicated after November 1 when the excise tax on television receivers went into effect.

(e) There were important factors, wholly independent of color, which tended to have an adverse effect on sales. These include the credit restrictions, a new excise tax (effective November 1), and other factors. Hence it is impossible to attribute the decline in sales, to the extent that there has been any, to the FCC color action.

(f) *Conclusion:* The FCC color decision had no appreciable effect on sales except at most for a few days of public confusion as to its meaning and effect.

[fol. 1078] Therefore, it appears that any possible adverse effect of the FCC decisions has already been fully discounted and it is highly unlikely that any dip in sales will recur upon and after November 20th which could be ascribed to the fact that the order then goes into effect pursuant to the decision. It should be emphasized, as noted in the affidavit of Frank Stanton, that CBS will in any event broadcast color programs on and after November 20th under its experimental authority if it should be unable to do so under commercial authority. Hence, the only difference will be that the broadcasts cannot be sponsored—a fact which would seem to be irrelevant so far as set sales are concerned.

4. In order to ascertain the exact effect of the FCC color decision on dealers' sales, CBS arranged for consultation with representatives of six leading retail chains and department stores and dealers in the New York City area. Each was asked the effect of the decision on its sales, and was asked whether it would agree to sign an affidavit setting forth the facts.

Without exception, each of these retail outlets refused to execute an affidavit, on the grounds that its maintenance of good business relationships with plaintiff RCA in this action precluded its furnishing such an affidavit. In view of the dependence of television retail stores and dealers upon

the major television manufacturers for their supply, this reluctance to jeopardize a long-standing and delicate business relationship is understandable, particularly since the affidavits requested are purely tangential to these dealers' interests.

This fact is cited only to explain why primary evidence of dealer reaction is unavailable.

[fol. 1079] Secondary evidence has accordingly been obtained. It is in two forms: (a) dealer interviews by research organizations; and (b) excerpts from news-stories appearing in the major newspapers and television trade-journals. These include direct quotations from a number of television manufacturers, distributors and dealers.

It is noteworthy that some of the secondary evidence thus obtained stems from the same dealers who declined to execute affidavits.

5. A careful survey was taken by McCann-Erickson, a research organization, of dealer reaction in the Los Angeles and San Francisco areas during the week of October 16-21. These areas may be taken as typical markets where there was a marked change in sales during this period.

One hundred and fifty dealers were interviewed in Los Angeles; 100 in San Francisco. The pertinent results tabulate as follows:

#### *A. Trend of Television Set Sales*

	<i>LA</i>	<i>SF</i>
Better than a month ago	16%	34%
About the same as a month ago	25%	37%
Not as good as a month ago	58%	27%
Don't know	1%	2%

Thus in San Francisco, 71% of all dealers interviewed reported sales at least as good as, or better than, the prior month (i.e., before the FCC decision adopting color standards); only one in four stated they had fallen off. In Los Angeles, 41% reported sales as good as, or better than, last month; but 58% felt they had declined.

Of all those reporting declines, nearly all agreed that the decline occurred between October 16 and 21, 1950—a week. [fol. 1080] It is to be noted, which immediately followed the Federal Reserve Board's credit restriction action.

*B. Reasons for Declining Sales Trend.* Those dealers who reported a decline—the 58% in Los Angeles and the

27% in San Francisco—were then asked what factors, in their judgement, caused such declines.

A majority of the dealers ascribed the decline to "Credit controls, too much down payment," "Confusion about color" ran second. The tabulated results:

	LA	SF
Total with declining sales	58%	27%
Reasons:		
1. Credit controls, too much down	36%	14%
2. Confusion about color	24%	12%
3. Rising prices	6%	
4. General unrest	4%	1%
5. Scarcity of merchandise	2%	5%

#### C. Future Effect of FCC Color Announcement on Sales.

In response to the question concerning what the future effect of the FCC color decision would be on their sales, the dealers were of the following opinion:

	LA	SF
Sales will suffer	65%	43%
Sales will not be affected	26%	47%
Don't know	9%	10%

This estimate of the future, made during the week of October 16-21, is particularly interesting in view of the almost total recovery, or even rising trend of sales nationwide, that has occurred in the week since the survey was [fol. 1081] made. *Retailing Daily*, November 1, 1950 (p. 34).

The fears reflected above were apparently part of a general confusion in the minds of the industry as well as in the public, and have not been borne out.

D. Have Sales Been Affected Yet By the Color Announcement? At this specific question, the replies became inconsistent; it would appear that the exact effect was as yet unclear to the dealers as a group:

	LA	SF
Sales already affected	49%	31%
Sales not affected	51%	69%

It is to be noted that by the week of October 31, 1950, sales volume in Los Angeles and San Francisco was re-



ported returned to "normal" or "above normal". *Retailing Daily*, November 1, 1950 (p. 34). Said one retail outlet on October 31: "Business is going like blazes." Another told the trade journal: "... the color question seems to have dropped into the background."

6. The Los Angeles and San Francisco sales reaction has been submitted as the one probably most marked in trend.

Other retail markets, in other parts of the country, showed far less reaction.

For example:

On October 13, 1950, the New York Herald Tribune, in its business column entitled "Buyers and Sellers", reported:

"Crowds thronged the television departments and bought heavily (on October 12, Columbus Day). The fact that color television has been approved and that commercial telecasts are to start November 20 apparently is having no adverse effect on the sale of black and white receivers."

[fol. 1082] Note particularly that this sales' strength appeared between the date of the FCC color announcement—October 10—and the announcement of the new rigorous credit controls on October 16. This emphatically supports the conclusion that any decline subsequent to October 16 should be primarily ascribed to the requirements of the new amendment to the Federal Reserve Board's Regulation W.

The October 14th issue of *Television Digest* reported (p. 8):

"Except for cancellation of small orders by some dealers, and to lesser extent by a few purchasers, there has been no great upset in today's flourishing market."

"Quick survey of key Washington (D. C.) distributors and dealers reveals there's not much public reaction, few cancellations. Two of city's largest chains sold more TV's Thursday (day after color report) than day before. Only negative reaction was from George Wasserman, owner of George's, one of coun-

try's biggest chains. Wasserman is worried about inventory; said he was going to cancel all orders Nov. 1, won't re-order until manufacturers assure him he won't be left holding the bag if sales drop. \* \* \*

"\* \* \* But business is good, he admitted, and he thought it will be years before manufacturers have color sets at any reasonable price level."

*Retailing Daily*, (Oct. 17th issue), reported as follows (p. 1):

"Declines were noted in *Philadelphia*, *Los Angeles* and *Chicago*, but the number of actual cancellations by customers was small."

"*Atlanta*, Oct. 16—With few exceptions, key retailers here have lost no sales because of the FCC ruling on color television."

*Newark, N. J.* "had little or no effect" from the decision by October 16th. (p. 42)

*Seattle, Wash.* suffered "a barely perceptible slackening off in retail sales," but no cancellation of orders were received, and "television sets are in short supply, and coming through in a trickle and dealers' stocks are at low levels due to recent unprecedented volume of sales." (p. 42)

*New Orleans* had no consumer reaction so far from the FCC color decision. Major dealers anticipated that there would be a "falling off in sales this week in reaction to the more stringent credit controls." (p. 42)

[fol. 1083] *Boston* reported to *Retailing Daily* (October 14, 1950) that "good sales continue," with "virtually no effect on sales" from the FCC decision; and by the week ending October 31, 1950 (*Retailing Daily*, November 1, 1950), the volume had even increased, in some cases, to "phenomenal".

In *Cleveland*, there was apparently a decline of sales, but the reasons given were mixed. *Retailing Daily*, October 19, 1950, reports (p. 34) that a survey among retail stores revealed the FCC color decision had a "marked effect". But while "most stores said that business had not been as brisk as before the color announcement, one buyer whose business has declined in the past week or so has offered the opinion that this decrease may not be entirely

due to the FCC decision. \* \* \* Cancellation of orders from distributors are negligible."

*Retailing Daily* headlined its October 17, 1950 issue as follows: "Most Retail TV Selling Holds Up Satisfactorily." Its survey concluded that the FCC color decision "has had less effect on retail sales than was expected, judging by early reports from key markets throughout the country."

*New York*, the nation's largest TV market, was surveyed again by *Radio Daily* (*Television Daily*) in its October 30, 1950 issue (p. 8):

"TV receiver sales in the New York Metropolitan area continued to hold their record high pace despite the general confusion and anxiety created by the color controversy, as *Radio Daily* survey revealed. Majority of retailers polled reported set sales as 'holding up.'"

7. Clear evidence appears from the newspaper and trade journal reports that even the slight declines felt in some cities were, at most, temporary conditions.

In *Chicago*, Vahey Television Sales, Inc., told the *Wall Street Journal* (issue of October 28, 1950):

[fol. 1084] "This is the first good week we've had since credit restrictions went into effect. Weekly sales have been running about 15% below 'normal'. This week we're about 15% ahead."

The *Wall Street Journal*, in the same article, noted:

"The pick-up isn't affecting some stores, particularly those that used to give easier credit than is now allowed (under the amended Regulation W)."

The *New York Post* Television Section of October 29, 1950 headlined its report: "The Calamity Is Over. Business Is Booming." Its article stated:

"There is no secret in the trade that The Calamity (the *New York Post*'s epithet for the FCC decision) caused widespread havoc." Some retailers reported that the 48 hours following the unfortunate (sic) announcement by the FCC there wasn't a single TV set moved. Beginning early this past week, however, sales



began to pick up. By the middle of the week nearly all retailers reported that sales were "normal."

On November 1, 1950, the *New York Daily Mirror* stated:

"Sales of television receivers were reported better than ever yesterday by leading dealers in the New York area. . . ."

"A. Davega, vice president of Davega Stores, Inc., told the *Mirror* that customers were not frightened away by the clamor over the color ruling. Most persons, he said, seemed to feel that the entertainment they get in black and white today is good enough to warrant purchasing a set and they know that sets now in use can be converted to receive CBS-color-cast—if, and when. 'Our October 14 sales', Davega said, 'were twice the volume of the Saturday previous to the ruling.'"

"Henry Broido, merchandising manager for Gimbel's, revealed the color announcement caused a temporary lull in sales which lasted a few days, but sales are 25 to 30% better now than in weeks prior to the ruling."

"A spokesman for Ludwig Baumann told a similar story of a lag in sales immediately after the color decision, then a brisk comeback which brought record business since the beginning of last weekend."

In *St. Louis, Retailing Daily* (October 18, 1950) reported that customers had a two-day "wait-and-see" reaction, but [fol. 1085] "This reaction was only temporary, most sources reported. Sales began to pick up at the end of the week, although they are well below '30 or 60 days ago' buyers observe." By October 31st (reported *Retailing Daily*, November 1, 1950), "sales are back to the high levels prevailing before October 16, when stricter credit curbs went into effect."

In *Detroit*, "business is holding up remarkably well" and "There has been no appreciable drop in TV sales," reports the same journal on October 18, 1950.

In *Radio & Television Weekly* (October 25, 1950), the trade journal reports, at p. 13:

"Los Angeles Trade Not Too Perturbed Over Color 'Mixup'—Distributors Say It Is Only 'Nine Days' Scare"—Business Expected to Continue 'Good.'"

In New York, the *Radio Daily (Television Daily)* (October 23, 1950) headlined its issue:

"TV Receivers Selling Despite Color Dispute."

"The great majority of retailers polled (in a *Radio Daily* survey in New York) reported set sales as 'holding up'. A few disclosed receiving some cancellations over the week-end when the color story first broke. But they insist that the loss is negligible and new orders continue to come in."

In *Radio and Television Weekly* (November 8, p. 1), a headline stated "Effects of Color TV Dispute No Longer Deterrent to Sales." The article reported in part:

"The adverse effect upon television set sales resulting from the recent Federal Communications Commission decision on color TV are to a large extent a thing of the past, a survey of dealers throughout the country during the past week indicated."

Most significant, and indeed clear evidence pointing to the fact that the plaintiffs in this action have not suffered damage, is the statement of RCA's own New York City distributor, Bruno, Inc., reported in *Radio Daily (Television Daily)*, issue of October 23, 1950 (see photostatic copy, Exhibit A):

[fol. 1086] "A spokesman for Bruno, Inc., the RCA distributor in New York, reported business is extremely good. Only one dealer cancellation was received due to the color mixup, he said, but this was more than nullified by the numerous requests from other dealers for deliveries to fill their needs."

The same RCA distributor was quoted directly in the trade journal *Variety*, issue of October 18, 1950:

"According to an exec. of Bruno-N. Y. which distributes RCA products,